



Level



Pressure



Flow



Temperature



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Analysis



Registration



Systems
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Technical Information

Omnigrad TA541

Industrial thermowell

Heavy duty - General purpose

From pipe - Threaded or flanged weld type



Application

The TA541 is an industry standard thermowell, manufactured from pipe, with a round extension and is designed for use with resistance and thermocouple thermometers mainly in heavy duty applications.

Benefits at a glance

- The process connection is threaded or flanged weld.
- The thermowell stem shape can be straight or tapered for fast response time.
- The extension and the immersion lengths can be chosen according to process requirements.
- A wide choice of standard pipe sizes, materials and process connection is available; other versions can be ordered according to specification.
- Different grades of flange finishing are also available.

Technical data

Pipe	■ Round extension: Pipe size ■ O.D.: ½" sch. 40/80, ¾ sch. 40/80 ■ Standard insert diameter: 6 mm (0.24 in) ■ Standard material: AISI316/W.1.4401
Connection to thermometer	Threaded: ½" NPT, ¾" NPT, G½", G¾" - male
Process connection	Type: Thread or weld flange ■ Thread: ¾" NPT, 1" NPT, 1½" NPT ■ Flange type: ANSI blind, DIN 2527/2526 Form C, UNI6000 Flange material: AISI316, A 105 Flange mounting: double side standard weld
Tip	■ Bottom shape: straight or tapered ■ Bottom thickness: D = 5 mm (0.2 in) for straight tip; D = 6 mm (0.24 in) for tapered tip
Surface finishing	Specification see product information

Mechanical construction

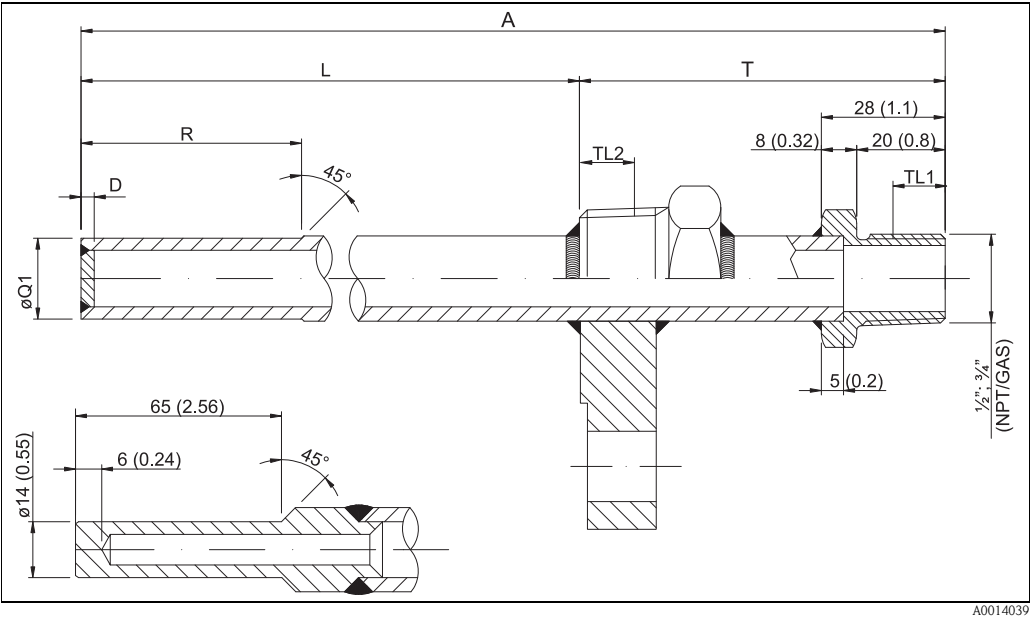


Fig. 1 Thermowell dimensions in mm (in)

Pos.-No.	Description
A	Total length, free selectable
L	Immersion length, free selectable
T	Extension, 95 mm; 120 mm or free selectable
D	Bottom thickness
øQ1	Diameter thermowell tip, specification see product structure
R	Themowell tip length, specification see product structure

Pos.-No.	Description		
TL1	Thread length for thread connection on thermometer	Length in mm (in)	Thread
		20 (0.8)	G½", G¾"
		8 (0.32)	½" NPT
		8.5 (0.33)	¾" NPT
TL2	Thread length for thread connection on process	Length in mm (in)	Thread
		8.5 (0.33)	¾" NPT
		10 (0.4)	1" NPT
		10.5 (0.41)	1½" NPT

Ordering information

Product structure

This information provides an overview of the order options available. The information is not exhaustive, however, and may not be fully up to date. **More detailed** information is available from your local Endress+Hauser representative.

TA541-	Heavy duty thermowell - General purpose - From pipe - Threaded or weld flange type					
						Thermometer Connection
					1	Thread NPT
					2	Thread GAS
						Shape Q1; R
					A	0 mm; 0 mm; straight
					B	20 mm; 100 mm
					C	0 mm; 0 mm; round
					D	14 mm; 65 mm
						Extension T
					1	95 mm
					3	120 mm
					9	 mm, as specified
						Immersion length L
					9	 mm, as specified
						Total length A
					Y	 mm, as specified
						Diameter; material
					TC	½" sch.40; 316
					UC	½" sch.80; 316
					VC	¾" sch.40; 316
					WC	¾" sch.80; 316
						Process connection
					AA	Not needed
					AB	Flange 1"ANSI 150 FF BL; B 16.5;JPI;316
					AC	Flange ANSI 1" 150lbs RF A105
					AD	Flange 1"ANSI 300 FF BL;B 16.5;JPI;316
					AE	Flange ANSI 1" 300lbs RF A105
					AF	Flange ANSI 1" 600lbs RF SS316
					AG	Flange ANSI 1" 600lbs RF A105
					AH	Flange 1-½" ANSI 150 FF BL; B 16.5; JPI; 316
					AJ	Flange ANSI 1½" 150lbs RF A105
					AK	Flange 1-½" ANSI 300 FF BL; B 16.5; JPI; 316
					AL	Flange ANSI 1½" 300lbs RF A105
					AM	Flange 1-½" ANSI 600 RF; 316
					AN	Flange ANSI 1½" 600lbs RF A105
					AP	Flange ANSI 1½" 600lbs RTJ SS316
					AQ	Flange ANSI 1½" 600lbs RTJ A105
					AV	Flange 2" ANSI 300 RF; 316
					AW	Flange ANSI 2" 300lbs RF A105
					AX	Flange 2" ANSI 300 RTJ; 316
					AZ	Flange ANSI 2" 300lbs RTJ A105
					BA	Flange ANSI 2" 600lbs RF SS316

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For more Endress+Hauser product please visit: www.ainstru.com
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